CADRE

AIR UNIVERSITY

CORPORATE LESSONS FOR DOD:

SECRETARY OF DEFENSE CORPORATE FELLOWS' PERSPECTIVE

by

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14 ABSTRACT

Today's Fortune 500 companies must be agile, utilize pace, be financially flexible and continue to re-invent themselves in order to remain viable in our economy. Although the differences between corporate America and the Department of Defense (DoD) may seem vast in their philosophy and implementation, there are actually more similarities than differences. The driving factors in both worlds are still leadership, strategy, fiscal responsibility, and responsiveness, to name a few. This paper focuses on those areas the authors feel are beneficial for implementation into the DoD. The paper begins with an introduction of the Secretary of Defense Corporate Fellows Program and brief overview of each Fellows assignment. Next, the authors introduce Booz Allen Hamilton, Sun Microsystems, and Johnson & Johnson providing an overview of companies in the program and giving the reader a baseline for reference. Next, the paper will walk through each corporate sponsor and will highlight those areas each Fellow observed that have the best opportunity for successful implementation in the DoD. Although the recommendations from each sponsor company are different, the authors feel this breadth provides a good cross section of ideas from all areas of corporate America. It must be noted that due to the non-disclosure agreements signed by all officers assigned to the Secretary of Defense Corporate Fellowship Program, the unfettered access to corporate sensitive information, and the legality associated with corporate proprietary information, the authors are unable to provide specific references for some of the data contained in this paper.

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Preface

This paper consolidates the findings of the three United States Air Force officers assigned to the 2008-2009 Secretary of Defense Corporate Fellowship Program. These Fellows spent their academic year at Booz Allen Hamilton, Johnson & Johnson, and Sun Microsystems. Each Fellow spent a total of 10 months observing, engaging, and experiencing corporate America and was charged with finding the best business practices in their respective companies and bringing them back to the Air Force and the Department of Defense for possible implementation. This paper represents a combined response to that charge.

Our greatest admiration and gratitude goes to our corporate mentors, specifically Dr. Dov Zakheim, Booz Allen Hamilton; John Dutra, Sun Microsystems; and Gary Warren, Johnson & Johnson for the guidance and assistance they provided during our Fellowship. Although each of the sponsor companies involved with the Secretary of Defense Corporate Fellowship Program deserves recognition for their contribution to the success of the program, the bulk of the learning that takes place belongs directly to our direct corporate mentors. It is because of their dedication and support of this program that we are able to meet the goals of the Fellowship. Additionally, we would like to thank the other Fellows assigned to the program we had the privilege of learning from; Bill Harrop, Darrell Lack, Dave LaGraffe, Joe Leonard, Pat Mason and Bob Schutz.

A final word of thanks belongs to our families. The program requires significant travel, and brings with it the uncertainty of being away from traditional military installations during our year in corporate America. We appreciate the sacrifices they make each and every day that allow us to continue our service to this country.

Abstract

Today's Fortune 500 companies must be agile, utilize pace, be financially flexible and continue to re-invent themselves in order to remain viable in our economy. Although the differences between corporate America and the Department of Defense (DoD) may seem vast in their philosophy and implementation, there are actually more similarities than differences. The driving factors in both worlds are still leadership, strategy, fiscal responsibility, and responsiveness, to name a few. This paper focuses on those areas the authors feel are beneficial for implementation into the DoD.

The paper begins with an introduction of the Secretary of Defense Corporate Fellows

Program and brief overview of each Fellow's assignment. Next, the authors introduce

Booz Allen Hamilton, Sun Microsystems, and Johnson & Johnson providing an overview

of companies in the program and giving the reader a baseline for reference.

Next, the paper will walk through each corporate sponsor and will highlight those areas each Fellow observed that have the best opportunity for successful implementation in the DoD. Although the recommendations from each sponsor company are different, the authors feel this breadth provides a good cross section of ideas from all areas of corporate America.

It must be noted that due to the non-disclosure agreements signed by all officers assigned to the Secretary of Defense Corporate Fellowship Program, the unfettered access to corporate sensitive information, and the legality associated with corporate proprietary information, the authors are unable to provide specific references for some of the data contained in this paper.

Chapter 1

Secretary of Defense Corporate Fellowship Program

...We must transform not only our armed forces, but also the Department that serves them by encouraging a culture of creativity and intelligent risk taking. We must promote a more entrepreneurial approach to developing military capabilities, one that encourages people, all people, to be proactive and not reactive, to behave somewhat less like bureaucrats and more like venture capitalists...

—Donald Rumsfeld, U.S. Secretary of Defense January 31, 2002

On 6 October, 1994, Secretary of Defense William Perry established the Secretary of Defense Fellows Program to take advantage of the organizational and operational opportunities made possible by the revolutionary changes in informational and related technologies. At its core was a desire to expose senior military officers to a corporate environment in order to learn new ways to improve, transform, and apply lessons from the corporate world in the DoD. In 2005, Secretary of Defense Donald Rumsfeld changed the name of the program to the Secretary of Defense Corporate Fellows Program (SDCFP) and its charter was expanded to include not only the technological aspect but also companies that had successfully reshaped their organizational structures and methods of operation to remain competitive in a dramatically changed global business environment.

Each military service chief must personally nominate a minimum of two officers in the grade of O-5 or O-6 to take part in the SDCFP. Officers chosen for the program spend an entire academic year at selected Fortune 500 sponsor companies in lieu of attending their service's Senior Developmental Education. The main objective is to give this small cadre of officers first-hand experience and knowledge of today's corporate realities, such as change management, adaptive and collaborative structures, knowledge management, the virtual workplace, how to leverage the best of new technologies and human intellect, and leading edge business practices that could be implemented to transform the DoD over the next decades. Since the programs initial inception in 1995, 92 officers have been placed at 43 different sponsor companies worldwide. The learning opportunities do not just benefit the DoD. Rather the exchange between the selected senior officers and their assigned sponsor companies affords corporate America the ability to tap into current ideas, programs, and leadership initiatives currently underway in the DoD as well.

The final requirement for the SDCFP is to brief senior DoD officials and Congressional representatives on lessons they believe would be helpful in transforming the DoD structure. For more specific information about the SDCFP, to include contact information as well as current and previous Fellows, please visit the SDCFP's public website: http://www.ndu.edu/sdcfp/index.htm.

Academic Preparation

In order to prepare selected officers for the significant change from their military experience to that of corporate America, the SDCFP has provided solid academic preparation aimed at smoothing the transition. Preparation for this academic year begins prior to the Fellows reporting to their sponsor companies with a one month long

orientation in the Washington D.C. area. This orientation provides all the Fellows an integral education in the current political, economic, social, and business issues facing corporate America. In addition, Fellows attend a one-week executive education program at the University of Virginia Darden Graduate School of Business. Immediately after orientation, Fellows report directly to their sponsor companies, and more specifically their corporate mentors, to begin their fellowship.

One of the major highlights of the SDCFP is the ability to learn not only from a Fellow's assigned company, but from all the participating sponsor companies. This is facilitated through "company day" visits to all sponsors throughout the year. Each sponsor hosts all SDCFP Fellows for a 1-2 day company overview. Each sponsor company plans, builds, and directs the specific agenda for their respective "company day." As an example, Fellows are normally briefed by the sponsor's senior leadership to include the Chief Executive Officer, Chief Financial Officer, Chief Technology Officer, and Senior Vice Presidents and company Partners. This exchange provides Fellows an unbiased look into the strategic complexities associated with each representative industry as well as the opportunity to learn leadership and management techniques required to run a successful company.

2008-2009 Participating Companies

Mr. Eric Briggs, SDCFP director, is responsible for selecting sponsor companies for each year's program. Only companies with a track record of strong strategic planning as well as constant innovation are selected to participate in the program. The list of companies associated with the SDCFP since its inception is impressive to say the least. The 2008-2009 sponsor companies are listed in Figure 1 (below).



2008 - 2009 Sponsor Companies

- Booz Allen Hamilton McLean, VA
- FedEx Express Memphis, TN
- Georgia Power Atlanta, GA
- Johnson & Johnson Skillman, NJ
- Northrop Grumman Electronic Systems Lithicum, MD

- Raytheon NCS McKinney, TX
- Sarnoff Corporation Princeton, NJ
- Sikorsky Aircraft Stratford, CT
- Sun Microsystems Menlo Park, CA

Figure 1 2008-2009 Sponsor Companies

Chapter 2

Sun Microsystems, Inc.

"Like electricity, like clean water, access to the network has become a social utility."

—Jonathan Schwartz President and Chief Executive Officer Sun Microsystems, Inc.

Sun Microsystems, Inc. is a global vendor of computer software, computer hardware, computer components, computer storage, and information technology services. The company has expanded considerably since its inception in 1982, and currently employs over 30,000 personnel in 165 countries across the globe.

Company History

In 1982, four graduate students at Stanford University founded a company based on their work for the Stanford University Network. Scott McNealy, Vinod Khosla, Andy Bechtolsheim, and Bill Joy brought together a mix of technical expertise, financial knowhow and vision. As a homage to their alma mater, the company's name "Sun" is actually derived as an acronym for the Stanford University Network¹. Sun Microsystems initially focused on high-end technical workstations based on the UNIX computing language, but quickly expanded their product line in 1987 when they moved into internet computing.

Sun Microsystems reached the \$1 billion in revenues mark only two years after its public offering in 1986, and made its debut on the Fortune 500 in 1993². Sun Microsystems refused to rest on its laurels and continued to grow with expansion into multi-processing, enterprise computing, open source software, and network systems.

Company Today

Sun Microsystems is a network infrastructure provider that connects billions of people, businesses and devices around the world. Jonathan Schwartz is the current Chief Executive Officer, President and a member of Sun's Board of Directors. Jonathan is passionate about the continued advancement of open source software because he believes the internet is a social utility that drives economic, social, and world-wide political progress.

Due to falling stock prices and continued quarterly corporate losses, on 14 November, 2008, Sun Microsystems announced a series of organizational changes designed to better align their cost model with the current downturn in the global economic climate. Besides changes to their organizational structure, Sun's Board of Directors approved a restructuring plan aimed at reducing costs by approximately \$700 to \$800 million annually. Their plan included a reduction of approximately 5,000 to 6,000 employees, representing approximately 15% to 18% of the Company's global workforce³.

On 20 April, 2009 after a failed acquisition attempt by IBM, Oracle (NASDAQ: ORCL) announced its bid to purchase Sun Microsystems. "Oracle will be the only company that can engineer an integrated system – applications to disk – where all the pieces fit and work together so customers do not have to do it themselves," said Oracle's chief executive, Lawrence J. Ellison, in a press release following the announcement⁴. It is too early to speculate as to where this merger will move the IT industry, or what Sun

Microsystems will look like after the deal is closed, but the synergy between the two companies will definitely change the way businesses operate when it comes to computing.

Fellow's Assignment

Colonel Scott Pleus was assigned to the Chief Technology Officer for Information Technology as his corporate mentor. He began his assignment as a horizontal project manager responsible to ensure projects that spanned organizational boundaries throughout the organization were coordinated and met designed timelines for completion. In this role, he was responsible for the complete re-organization of Sun's expansive Wiki forums. Wiki's are interactive social networking software that allows users to freely create and edit Web page content using any Web browser. Wiki's are one of the most useful tools used at Sun Microsystems due to their collaborative nature and their ability to connect geographically distributed employees. Col Pleus was assigned to complete the installation of the computing infrastructure in Sun's Project Blackbox. Project Blackbox is a completely mobile and modular data center that is built inside a standard shipping container to deliver extreme energy, space, and performance efficiencies. Pleus was designated as a mentor on Sun's Transformation Team, Sun's Next Generation Workplace Environment Team, and an honorary member of the Chief Information Officer's Information Management Group. In addition, Pleus was a keynote speaker on challenges and leadership techniques for effective management and communications at various business units throughout Sun Microsystems.

Section Overview

During the course of the academic year at Sun Microsystems, Col Pleus saw numerous innovative ideas and applications potentially useful for implementation into the DoD. The sheer computing scale requirements within the DoD meant, however, that three specific business practices would offer the biggest payback. A data center redesign, ultra-thin client desktop computing, and open source software would be best suited for consideration. The impetus for the first two initiatives revolves solely in the substantial electrical power reductions that could be realized through consolidation and redesigning of the DoD computing model. Additionally, the ultra-thin client model of computing provides an exponential increase in desktop security with a marked decrease in the number of personnel required to maintain such a network. The third initiative, open source software, offers increased security, scalability, and cost reductions in licensing as compared to proprietary software offerings.

Data Center Redesign

Throughout the last decade the impact of data center IT systems has become a rising concern, specifically on the environmental and the financial burden that power generation for this endeavor requires. With a billion people participating online each and every day, the combined "internet" network consumes more than 100 billion KW of electricity and costs approximately \$7.2 billion annually in utility bills⁵. Rising energy costs and the increased power requirements of data centers have made power consumption a key factor in IT planning and budgeting. Some analysts predict that IT infrastructure power usage will soon cost more than the hardware itself. Sun Microsystems has embraced the idea of changing its consumption practices and is leading the industry on the green IT front. To help customers get the most from green IT, Sun has implemented a Sun Eco Innovation

Initiative. The program was built upon Sun's experience and success in driving energy efficiency at its own data centers.

At the center of Sun's foray into an environmentally friendly computing model was a desire to lower operating costs while increasing production values for its customers. Sun recently completed a data center efficiency project that combined best practices in data center design with hardware consolidation at headquarters in Santa Clara, CA. Sun was able to increase computing capacity by over four times while reducing the number of servers by almost 50 percent resulting in 60 percent reduction in power consumption. Through this initiative, Sun was able to realize \$860,000 savings in annual electricity used for computing and cooling the data center⁶.

The entire program revolved around three basic focus areas; reducing overall square footage, reducing the number of servers, and increasing the efficiency of cooling. Sun was able to reduce the footprint in Santa Clara's data center by half from 254,000 sq. ft. to 127,000 sq. ft., and by cutting the number of servers from 2,177 to 1,240⁷.

The company utilized a radical departure from traditional cooling design by employing smart cooling devices that gauge when and how much air conditioning should to be used, instead of the traditional model that pumps cold air into the data center at the same rate 24 hours a day. Additionally, by removing the traditional raised floor inside the data center and placing cooling ducts and cabling directly overhead instead of below floor, air flow was substantially increased. That lowered cooling demands and cut power usage from 2.2 megawatts down to 500 kilowatts. Dave Douglas, Sun's Vice President of eco responsibility, said the changes implemented in the Santa Clara data center should completely pay for itself in three years. On top of that, the company saved an estimated

\$9 million by better utilizing the space it already had, rather than constructing a new data center⁸.

Ultra-Thin Client Technology

One area many companies forget about when looking at reducing their electrical footprint is the total power consumption of the hundreds of thousands of desktop systems used outside the data center. The sheer number of individual desktop systems, stand alone PC's and laptops, creates a myriad of potential security threats to the network.

The concept of an ultra-thin client is rather simple. An individual user's desktop environment and productivity applications are hosted in a centralized data center where they can be managed and maintained with greater security and efficiency. In other words, a worker has only a monitor, keyboard, and mouse at their desk, not a complete stand-alone computer. Because there is no actual computing taking place at a worker's desk, the power consumption decreases.

For example, a Dell Inspiron E531 PC with a dual-core AMD processor, 2GB RAM, two hard-disk drives, and a mid-range graphics card that can drive two large flat panel monitors consumes approximately 110 watts. An ultra-thin client consumes only 3 watts of power (not including the power required to run the data center.) Looking only at the power savings, at \$0.10/KWh a company could save 1.9KWh per day or approximately \$70 per year. While seemingly modest, if \$70 was multiplied by each desktop system in the DoD inventory, the sums would add up very quickly⁹.

Another benefit of utilizing ultra thin client devices is that the device retains no information once the user session is ended. Because there is no actual processing, local storage, or persistent memory in the device, nothing is stored on the desktop device.

Thus if the physical hardware is stolen, the perpetrator has only the hardware (monitor, keyboard, mouse) and none of the data.

Finally, ultra-thin clients offer a huge benefit to workers by providing access to their work session from any point in the network. Users are not required to login at specific machines or at "home station" network locations to access their active process—the session exists on the server supporting the thin client population and can be accessed from anywhere connected to the server within the network. For example, a worker at Sun Microsystems based in California could remove their badge (which contains a smartcard chip) from their ultra-thin client device while in the middle of an e-mail and the screen will go blank. Should that employee arrive in Linlithgow, Scotland for a meeting, they could put their badge into any ultra-thin client device and their cursor would still sitting in the same place on that email. Imagine the possibilities this would have for deploying members of the DoD. Implementation of ultra-thin clients throughout the DoD would alleviate the necessity for resetting email addresses, ensuring computer Information Assurance compliance, and connectivity to a "home network." Because all of the systems administration for the entire network is centralized, manpower savings can be realized as well. Sun Microsystems has over 30,000 ultra-thin clients deployed throughout the globe, yet uses only seven systems administrators to manage the same number of accounts 10.

Open Source Software

A major trend throughout industry, and one I believe needs to be watched closely by DoD, is the move from proprietary software to open source software. Open source software is a development method for software that harnesses the power of distributed

peer review and transparency of process¹¹. Open source software can be at the enterprise level and run Enterprise Resource Programs like Oracle and SAP, or it can be individual user applications like Star Office that can replace the standard Microsoft Office suite of products.

One of the frequent misconceptions of open source software is that it is less secure than proprietary software because everyone can see the code the software was built upon. According to Bill Vass, President of Sun Microsystems - Federal, this could not be further from the truth. "When you go through security at an airport, there is a group of people that check your carry-on luggage. Everyone knows what the rules are for what can and cannot be carried onto an aircraft....they are open about this. If someone were to say 'trust me, I packed this myself and followed the rules' would you feel more or less safe? This is the issue with proprietary software, someone is telling you they packed their carry-on themselves and to trust them they followed the rules. Current applications like Microsoft Office have millions of lines of code, and each line has the opportunity to open or exploit a security feature within an operating system. While the majority of these security breaches are completely unintentional, especially for software produced for the DoD, they can be malicious and either way can have serious ramifications on the security of a given network.

Open source software, by its basic definition, is "open" allowing everyone to see the code, allowing more scrutiny and pointing out the security flaws before they can be exploited. This is accomplished through a community of peers, not through a proprietary contract. Open peer review of software code allows any software engineer to continually analyze and upgrade open source offerings, with the final goal of better quality, higher

reliability, more flexibility, lower cost, and an end to vendor lock-in when it comes to long-term software service contracts.

On 17 Mar, 2009, the Defense Information Systems Agency (DISA) announced it had entered into a Cooperative Research and Development Agreement (CRADA) with the Open Source Software Institute that focuses on release of an open source version of DISA's internally developed Corporate Management Information System (CMIS)¹³. CMIS is a web-based federal workforce management and administrative software suite and is used by over 16,000 worldwide users¹⁴.

This announcement was made by Jack Penkoske, DISA's Director of Manpower, Security and Personnel during a presentation at the National Security Agency and DISA Technology Transfer Showcase. "We have a lot invested in the CMIS application suite and numerous other Government agencies have asked if we'd allow them to adopt CMIS for their internal use. We chose a CRADA and open source model so that we could leverage other agencies', academic, industry and the Open Source community's enhancements and modifications to improve DISA's system. We believe this will be a win-win for all involved. ¹⁵,

Open source is not the answer to every software question in industry nor the DoD. Proprietary software has its proper place in the market, and is a necessary part of how corporations operate efficiently. However, there is a move afoot within the US government to look into open source software being directed by the Commander in Chief himself. President Obama's administration asked Sun Microsystems's former CEO and now Chairman of the Board, Scott McNealy to draft a white paper on open source software and its benefits for governmental implementation 16, and President Obama's campaign website ran on a stack of open source software known as LAMP 17.

Chapter 3

Johnson & Johnson

"Our enduring business model starts at the beginning with the commitment to Our Credo, a real compass for guiding our business. The four tenants...provide a clear focus for how we approach every decision. Patients and customers come first, and then our employees, our communities, and our shareholders."

—William C. Weldon Chairman, Board of Directors, and Chief Executive Officer Johnson & Johnson

Johnson and Johnson is a global leader in providing a broad-based portfolio of health care products to customers across the globe. With sales during 2008 topping the \$63 billion mark, Johnson & Johnson was elevated to 29th position in Fortune Magazine's 2009 ranking of the 500 largest companies¹⁸. Comprised of more than 119,000 employees in over 200 countries, Johnson & Johnson relies on a time-tested decentralized management approach which places management decisions close to customers thereby allowing for agility and innovation¹⁹. Johnson & Johnson's committed focus and strict adherence to their corporate Credo has built their reputation as one of the most admired companies in the world.

Company History

Johnson & Johnson was founded in 1886 by three brothers, Robert Wood Johnson Sr., James Wood Johnson, and Edward Mead Johnson, all who shared the dream of providing the world's first commercially produced surgical dressing²⁰. Their noble

efforts were aimed at reducing the number of hospital patients who died following surgery as a result of infections. After successfully producing the first surgical dressing in 1886, the company quickly expanded into new products such as first-aid kits in 1890 and BAND-AID® Brand Adhesive Bandages in 1921²¹.

In 1932, Robert Wood Johnson, Jr. became the president of Johnson & Johnson. It was under his pen in 1943 that the profound business document known as the Johnson & Johnson Credo was put to paper solidifying the responsibilities and priorities that would become the company's enduring moral compass.

After the company went public on the New York Stock Exchange in 1944, a series of acquisitions transformed the budding health care company into one of the largest, most diverse health care suppliers in the world. Integration of McNeil Laboratories in 1959 brought the famous TYLENOL™ brand over-the-counter pain reliever into Johnson & Johnson's portfolio of products²². The acquisition of several new product lines in the 1990s, including Neutrogena, Cordis, and DePuy, continued to diversify and grow the business²³. By 2009, Johnson & Johnson had expanded to a family of over 250 operating companies located in 57 different countries²⁴. This growth has resulted in Johnson & Johnson earning the status of the world's largest medical diagnostics and devices company, the world's fourth-largest biologics company, the seventh largest pharmaceuticals company, and one of the most respected consumer companies in the world.²⁵

Company Today

To the applause of several thousand shareholders at the Johnson & Johnson 2009 Annual Meeting of Shareholders, Mr. William C. Weldon, announced an incredible feat. The company would increase it's quarterly dividend for the 47th consecutive year. This, coupled with the fact that 2008 became the 76th consecutive year of sales increases along with the 25th consecutive year of adjusted earnings growth, marked J&J's success at consistently performing across the entire spectrum of economic conditions.

Johnson and Johnson is organized along three diverse, multi-billion dollar operating sectors; Consumer Health Care, Pharmaceuticals, and Medical Devices and Diagnostics. The corporation's strategic framework is centered on an operating model consisting of four main operating concepts; first, being broadly based in human health care, second, managing the business for the long term, third, following a decentralized management approach, and finally, focusing on people and values²⁶. These operating concepts allow efforts to be focused on four main business priorities; winning in health care, capitalizing on convergence, accelerating growth in emerging markets, and developing leadership and talent²⁷. Overarching the operating model is the profound Johnson & Johnson Credo which, according to Weldon, is the "heart and soul of the corporation.²⁸"

"We are managing our business with an approach that has been durable over the decades and is still incredibly adaptive to change"

– Mr. William C. Weldon 2009 Annual Meeting of Shareholders

Fellow's Assignment

Lt Col Jim McCreary was assigned to the Johnson and Johnson Consumer Sector located in Skillman, New Jersey. As part of the Consumer & Personal Products Worldwide Division's Engineering & Technology Innovations organization, he was exposed to a variety of development opportunities as part of his Senior Development Education program. His corporate sponsor was Mr. Gary Warren, Vice President, Worldwide Engineering. During his 11 month assignment, Lt Col McCreary collaborated on a daily basis with Mr. George Quirk, Senior Director, Engineering and Mr. Ullrich Flathmann, Director, Engineering.

During the course of the academic year, Lt Col McCreary participated in a variety of business experiences which have provided him a sound background of the innerworkings of one of the most successful and respected corporations in the world. Although exposed to a wide-variety of experiences, two main areas accounted for a majority his efforts. First, he was a member of the Flawless Project Execution Team responsible for working business issues centered on improving the execution of projects across the corporation. In addition, his other significant undertaking was to organize and execute a comprehensive strategic review of the corporation for his colleagues participating in the Secretary of Defense Corporate Fellows Program.

Main Duties at Johnson & Johnson

Upon arriving at Johnson and Johnson, Lt Col McCreary was quickly integrated into the Flawless Project Management Execution (FPX) Team. The FPX Team was an eight-person team tasked with the responsibility of deploying a Johnson & Johnson unique project management methodology across all sectors of the corporation. As Johnson &

Johnson utilizes a decentralized management approach, a major part of the effort was to create and maintain a value proposition for potential users of this methodology. In essence, the methodology was required to demonstrate value if organizations were to be willing to apply resources, both in term or course fees and time allotted for employees to attend the workshops.

First on his task list was to participate in the 2008 Johnson & Johnson Innovation & Technology Summit held in San Juan, Puerto Rico. The main objective of the FPX Team was to highlight the various FPX training services by providing a presentation and participating in an informational poster session. With several hundred Johnson & Johnson employees attending from around the world, the goal of proliferating the FPX brand across the sectors was a success. Although participating in both the presentation and the poster session was beneficial, the exposure to various topics and employees cutting across the entire corporation was invaluable and paved the way for future interactions between Johnson & Johnson's executive leadership and Lt Col McCreary.

An additional task in the FPX arena was for Lt Col McCreary to develop and roll-out a certification program in order to recognize Johnson & Johnson employees who had mastered the application of the methodology. As part of propelling the FPX platform to a new level, it was necessary to collaborate across the team and various sectors to ensure that optimal certification criteria and procedures were developed. Once established, applicable criteria and procedures were posted to an electronic bulletin board to be referenced by all Johnson & Johnson colleagues. At the time of writing, four individuals had successfully been certified as part of this newly established program.

The third task related to FPX was to establish a global FPX Community of Practice aimed at increasing collaboration between key leaders and users of the FPX

methodology. Lt Col McCreary established an initial membership list and organized the initial kick-off session. The first forum proved to be a success as evidenced by the positive post session feedback.

In addition to his duties as part of the FPX Team, Lt Col McCreary was also responsible for organizing and executing the Secretary of Defense Corporate Fellows Program Company Day hosted by Johnson & Johnson. In preparation for this session, he had the privilege of meeting with senior members of the corporation including several members of the executive committee. Through these high value discussions, visibility into strategic-level issues at Johnson & Johnson and within the health care industry at large was gained.

Achieving Excellence in the Workplace

After having the privilege of spending ten months at Johnson and Johnson, it became abundantly clear that the company is an industry leader in creating a work environment that lends itself to employees achieving excellence. This exceptional workplace atmosphere developed over Johnson & Johnson's 120-year history is key to the company's success and reflected in the company's tremendous ability to recruit and retain exceptional talent. The optimal employee work experience presents a solid opportunity from which the Department of Defense could benchmark.

Focus on Ethics and Responsibilities: The Credo

The first and most important attribute at J&J is their uncompromising view regarding corporate responsibilities and ethical behavior. The timeless business document entitled "Our Credo" is at the center of all corporate decision making processes and is the topic of discussion at nearly every widely attended function. Since 1943, it has provided the lasting framework from which countless decisions at all levels of the company have been made.

In the Credo's list of prioritized responsibilities, doctors, nurses and patients come first followed by employees (see Figure 2). The next responsibility is to J&J's communities including social responsibility for the environment. The company's final responsibility is to J&J's shareholders who, if all other responsibilities are met, should be entitled to a fair return. For employees at all levels, the Credo acts as the compass to manage the business for the long term.

Johnson & Johnson employees invest time participating in Credo Action Groups which strive to keep the Credo at the center of employee and work group actions. These groups focus on recommending steps that will continue to transform the company on a variety of issues ranging from improving the workplace to sustaining the environment. In addition to producing recommendations for improvement, a variety of scenarios are discussed in a small group setting to emphasize the importance of ethical behavior and corporate priorities. As a result of Credo Action Group efforts, a small book entitled "Reflections of Our Credo" was published that captures how the Credo has touched the lives of employees over the years. A copy of this book was presented to all the attendees

at the 2009 Annual Meeting of Shareholders and is scheduled to be presented to all 119,000 company employees in the near future.

While the Department of Defense certainly spends a great deal of time and resources focused on ethical behavior, benchmarking of J&J's effective use of small Credo Action Groups could be a way to personalize ethics discussions down to the individual and work group level. As Johnson & Johnson's example suggests, disciplined use of these forums has been very effective in cementing corporate priorities and responsibilities in the minds of employees at all levels of the corporation.

Our Credo

We believe our first responsibility is to the doctors, nurses and patients, to mothers and fathers and all others who use our products and services. In meeting their needs everything we do must be of high quality. We must constantly strive to reduce our costs in order to maintain reasonable prices. Customers' orders must be serviced promptly and accurately. Our suppliers and distributors must have an opportunity to make a fair profit.

We are responsible to our employees, the men and women who work with us throughout the world. Everyone must be considered as an individual. We must respect their dignity and recognize their merit. They must have a sense of security in their jobs. Compensation must be fair and adequate, and working conditions clean, orderly and safe. We must be mindful of ways to help our employees fulfill their family responsibilities. Employees must feel free to make suggestions and complaints. There must be equal opportunity for employment, development and advancement for those qualified. We must provide competent management, and their actions must be just and ethical.

We are responsible to the communities in which we live and work and to the world community as well. We must be good citizens – support good works and charities and bear our fair share of taxes. We must encourage civic improvements and better health and education. We must maintain in good order the property we are privileged to use, protecting the environment and natural resources.

Our final responsibility is to our stockholders. Business must make a sound profit. We must experiment with new ideas. Research must be carried on, innovative programs developed and mistakes paid for. New equipment must be purchased, new facilities provided and new products launched. Reserves must be created to provide for adverse times. When we operate according to these principles, the stockholders should realize a fair return.

Johnson Johnson

Figure 2 – Johnson and Johnson "Our Credo" Source: Johnson & Johnson Corporation

Establishing a Strong Organizational Identity

The second attribute that makes Johnson & Johnson stand out from other organizations is the strong sense of corporate identity that has been developed throughout their workforce. Johnson & Johnson's hard-hitting motto *Caring for the world...one person at a time*™ is certainly a widely-held belief across the company. There is a real sense within the J&J community that the diverse efforts of employees are positively impacting lives around the globe every day. It's this deeply rooted belief that one is working to provide life changing products and services that sets Johnson & Johnson apart from many other Fortune 500 companies.

While organizational identity is also strong within the Department of Defense, opportunities exist to leverage the observation made at J&J. One area that is especially noteworthy is the manner in which Johnson & Johnson communicates its success stories across their geographically dispersed employees. A quick glance at an annual report gives the reader a sampling of the noble achievements accomplished during the previous year. Whether through a vignette describing work in Africa to prevent the spread of HIV or efforts to field the next life saving drug, the spotlight is focused on how Johnson & Johnson employees make a difference.

Success stories are often the topic in internal meetings with examples also woven into many company events. In addition, testimonials of life changing situations adorn the walls of common areas such as cafeterias and hallways. It's nearly impossible to not notice hard-impacting success stories as you walk through a J&J facility. It's a great use of marketing expertise to spread the word of the company's contribution to humanity.

Like Johnson & Johnson, the Department of Defense has a rich history of exemplary service to mankind. Successes achieved on a daily basis can go unnoticed by a large segment of DoD's outstanding workforce. Improving efforts to capture and publicize these events in and around the workplace would assist in painting a more vivid picture in the minds of Department of Defense employees.

"There are not many companies that treat employees like family, but Johnson and Johnson is one...Our Credo is not a bunch of words on paper. It is a document that is lived"

Mr. Vince Fascone
 Johnson & Johnson Employee

Chapter 4

Booz Allen Hamilton

"We are a people business, and as leaders we must stay close to our people. Our never-ending mission is to cascade down "what's special" about Booz Allen. There's no magic formula to this -- just relentless effort."

—Ralph Shrader Chairman and Chief Executive Officer Booz Allen Hamilton

Booz Allen Hamilton has been at the forefront of strategy and technology consulting for 95 years. Providing a broad range of services in strategy, operations, organization and change, information technology, systems engineering, and program management, Booz Allen is committed to delivering results that endure. Headquartered in McLean, Virginia, Booz Allen has 20,000 employees and generates annual revenue of over \$4 billion²⁹.

Company History

Founded in 1914, Booz Allen Hamilton takes its name from their three founding partners, Edwin Booz, James Allen, and Carl Hamilton³⁰. A pioneer and innovator in the industry, Booz Allen Hamilton is credited with helping to establish the profession of management consulting. The firm played a role in the U.S. Navy's preparation for war in 1940, Chrysler's historic turnaround in 1979, and national security in the 21st century³¹. Historically, a general management consulting firm Booz Allen Hamilton truly

transformed itself under the leadership of their seventh Chairman, Dr Ralph Shrader. Since taking the helm as Chairman and Chief Executive Officer (CEO), Dr Shrader has led Booz Allen through a significant period of growth and strategic realignment. Prior to his election as Chairman and CEO, Shrader was President of Booz Allen Hamilton's Worldwide Technology Business, now known as its U.S. government practice. Booz Allen Hamilton's largest client is the U.S. Department of Defense and Armed Forces. In 2008, Booz Allen Hamilton sold a majority of its stock to The Carlyle Group and spunoff its commercial or non-governmental consulting business. Booz Allen Hamilton is managed and the rest of its stock owned by its 110 officers (internally known as partners). What really sets Booz Allen apart is not its size and stature, but its people and culture — which will be described throughout this paper.

Company Today

On July 31, 2008, Booz Allen Hamilton separated into two companies, Booz Allen Hamilton and Booz & Company. This business transaction split Booz Allen Hamilton's U.S. government and global commercial businesses into two separate and distinct firms. The Carlyle Group purchased the majority stake in the U.S. government consulting business for \$2.54 billion, which retained the name Booz Allen Hamilton. Hereafter, referred to as Booz Allen. The firm's commercial U.S. and international businesses now operates as Booz & Company. Dr Shrader said, "Completing this separation of our two core businesses is an important milestone in our history. The success of these businesses over many decades and the significant opportunities that lie ahead for both are a tribute to generations of Booz Allen people and clients. Looking ahead, we are excited about Carlyle's investment and the ability to leverage their

experience in our growing U.S. government consulting business, and we look forward to continuing to collaborate with our Booz & Company colleagues on assignments where our joint capabilities benefit clients." ³² The Carlyle Group is a global private equity firm with \$82.7 billion of assets under management committed to 60 funds as of March 31, 2008. Carlyle invests in buyouts, venture & growth capital, real estate and leveraged finance in Africa, Asia, Australia, Europe, North America, and South America focusing on aerospace & defense, automotive & transportation, consumer & retail, energy & power, financial services, healthcare, industrial, infrastructure, technology & business services, and telecommunications & media. Since 1987, the firm has invested \$46.3 billion of equity in 802 transactions for a total purchase price of \$216 billion. The Carlyle Group employs 950 people in 21 countries. In the aggregate, Carlyle portfolio companies have more than \$109 billion in revenue and employ more than 415,000 people around the world. ³³

Despite the economic crisis of 2009, Booz Allen remained financially stable and secure. According to their 2008 Annual Report, "for more than a decade Booz Allen's government business has enjoyed double-digit growth. In 2008 alone, the firm's revenue was up 18%, profitability is strong, and we have a backlog of sold work in excess of \$2 billion." ³⁴

There are many things unique about Booz Allen – its culture, ethics, meritocracy, and its measurement and reward system – but what truly makes it unique at the very core is its partnership model.³⁵ It is very important to note, Booz Allen is a privately held corporation – the owners are its officers and the Carlyle Group – yet it operates, to include all its decision-making, in a true partnership manner. The partners manage to a single profit and loss statement where all the firm's partners have a mutual incentive to

help each other accomplish what is in the best interest of the firm and its clients, in all situations. Working towards a single profit and loss statement encourages partners and their teams to collaborate for the collective good of the firm. That model removed internal competition and was particularly successful at doing so because internal collaboration was rewarded. Competition is reserved for external rivalries in the marketplace.³⁶

Booz Allen Hamilton is frequently recognized for its quality work and corporate culture and has been ranked highly as one of the best companies to work at by several magazines.³⁷ In 2009, for the fifth consecutive year, *Fortune* magazine named it one of "The 100 Best Companies to Work For." *Fortune* attributed its selection to such soughtafter benefits as a job-sharing program, compressed workweek, telecommuting options, on-site child care, on-site fitness center, subsidized gym membership, and Booz Allen's unusual policy of contributing 10% of employees' pay into 401(k)s, regardless of whether the employee contributes.³⁸ *Working Mother* cited the firm's flextime, child care, and telecommuting options in naming Booz Allen to its "100 Best Companies for Working Mothers" list, for the 10th consecutive year.³⁹ And, *BusinessWeek* named Booz Allen to its 2008 list of "Best Places to Launch a Career" for the third consecutive year. *BusinessWeek* lists five key factors that contribute to Booz Allen's reputation as an excellent place to launch a career⁴⁰:

Exceptional people – New employees work with talented people with diverse backgrounds and perspectives.

Core values – Each employee embodies Booz Allen's core values—client service, excellence, diversity, entrepreneurship, teamwork, professionalism, fairness, integrity, respect, and trust—in all of his or her work.

Variety of work and its impact – Booz Allen staff work with top clients in the government and industry that are involved in projects supporting security, health, and the overall well-being of the nation.

Commitment to personal and professional growth – The firm's management supports the development of each individual and provides opportunities for employees to grow as the firm grows.

A prosperous, stable business environment – Booz Allen has logged years of double-digit growth, which translates into enormous growth opportunities for the staff.

Fellow's Assignment

While at Booz Allen, Colonel David Zorzi was assigned to Dr Dov Zakheim, Vice President for International Defense Cooperation as his corporate mentor. Col Zorzi was embedded within the Defense Global Operations business and treated as any other employee at the Principal-level. He attended the typical first day welcome and newcomer orientations training which was quickly followed up by a required two day on-boarding program where new hires are steeped in Booz Allen history, heritage, and culture. Another two day session is required to impart the specific training and knowledge required based on their level within the firm. During Col Zorzi's entire tour at Booz Allen he enjoyed unfettered access to interview its partners and partake in a wide variety of venues to consider Booz Allen best practices for potential use in the Department of Defense and in the Air Force. In addition, he was a welcomed member of many internal teams and bodies that included: personnel assessment review and reward committees, strategic business capture teams, Cyber wargaming symposiums, offsite strategic planning, market development boards, corporate leadership training, and select partner-only forums. Col Zorzi was also assigned to specific projects.

One such assignment was an enterprise-wide assessment of the firm's international presence in support of U.S. government contracts. The analysis included determining Booz Allen's addressable market, a detailed lay down of its foreign footprint, and its

ability to leverage current work abroad. Senior leadership will use that report to make strategic decisions on pursuing and further developing those markets.

Section Overview

During the course of the academic year at Booz Allen, Col Zorzi witnessed numerous innovative ideas and industry best practices. This paper could easily have been written about Booz Allen's highly successful matrixed organization, its partnership model, its industry leading collaborative environment which permeates the entire firm, or even a case study on the split of Booz Allen Hamilton and Booz & Company – all these topics are worthy of independent articles. As the aforementioned topics are beyond the scope of this paper, there is one best practice which merits serious consideration for implementation within the DoD. It is a performance feedback system called the Peer Lead 360° Competency Assessment Process. While the matrixed operating model and the collaborative nature are essential to the fabric of Booz Allen's operating model, it is the 360° Assessment process which ties, reinforces, and drives the behaviors key to Booz Allen's financial success.

Peer Lead 360° Competency Assessment Process

The Armed Forces and Booz Allen share similar cultural identifiers. Both are meritocracies, demand high ethical standards, instill core values, and embrace diversity in backgrounds and as well as thought. Soldiers, Sailors, Airmen, Marines, and civilians stay in the armed forces for various reasons. Yet across services the leading motivations are: serving a cause greater than oneself, shared camaraderie, appreciation for the rich military heritage, the culture of service, excellence, and integrity, and a belief in high

ethical standards. Col Zorzi discovered that Booz Allen's employees shared many of the same ideals and values as their military and civilian servant counterparts at DoD. These beliefs and values motivate employees to remain loyal and committed to the firm. For instance, Booz Allen employees believe that by partnering with clients to solve their most important and complex problems – "making their client's mission their mission" – they too are serving something bigger than themselves. And similar to the Armed Forces, they have a long history rich with heritage that embodies their founders' core values: client service, diversity, entrepreneurship, excellence, teamwork, professionalism, fairness, integrity, respect, and trust. They are dedicated to growing and strengthening the institution consistent with these core values. While most reputable institutions, organizations, and businesses have positive core values; what Col Zorzi found striking was that all Booz Allen employees were measured and rated on them through the 360° Assessment process.

The Services use basic training, promotion exams, professional military education, and leadership example to assimilate recruits and new hires to the organization's standards and core values. While effective methods that have worked for numerous years, there is potential to improve the process and reinforce desired behaviors from military and civilian members through implementation of a peer lead 360° Assessment Process. The Booz Allen process incorporates the ability to assess, reward, and reinforce positive attributes and behaviors on an annual basis.

Unlike the current top-down military and civilian appraisal system where supervisors rate subordinates with little, if any, input from their subordinate's, the top-down and across Booz Allen 360° Assessment includes input from peers, customers, subordinates, and senior ranking personnel into account when assessing and rewarding.

And, the 360° Assessments are used firm-wide from the most senior partner to the most junior consultant. According to Booz Allen, their 360° Assessment is a competency-based career development model which focuses on the knowledge, skills and abilities required to advance, move forward, and increase performance. Performance appraisals are typically a retrospective look at the past, focusing on accomplishments, whereas the Competency Assessment focuses on the future. It identifies development actions and evaluates knowledge, skills, and abilities necessary to attain the next level.

The 360° Assessment Process

The 360° Assessment process is composed of five steps: Self Assessment, Input Interviews & Data Gathering, Assessment Writing, Committee Discussion, and Assessment Debrief. The 360°Assessment process is illustrated in Figure 3.⁴³

Step 1: Self Assessment. The employee (Assessee) completes a self assessment. The self assessment contains observations and evidence on how the employee performed over the past year and how he/she met competency and functional expertise objectives. Employees also provide examples of their leadership skills and staff development, their personal development and goals for the coming year, and motivations and frustrations about their job.

Step 2: Input Interviews & Data Gathering. The Reviewer, who is external from the Assessee's organization, meets with the Assessee and Manager to review the self assessment and discuss the Assessee's progress over the past year. The Reviewer will then interview co-workers, customers, and other individuals that the Assessee has worked with or managed over the past year. Because the Reviewer is selected from outside the Assessee's organization, employee fear of bias and internal politics is decreased.

Information can be collected through face-to-face interviews or telephone conversations. In addition, an electronic system is available to collect the data from interviewees.

Step 3: Assessment Writing. Once interviews are complete, the Reviewer writes the assessment. Observations and evidence of how the Assessee performed are critical to support the ratings given. The Assessee's Manager is provided a draft of the assessment before it reaches the Committee. The Manager assists with finalizing the Assessee's Development Actions and Assignment Objectives.

Step 4: Committee Discussion. This phase includes the gathering of an Assessment Board for Reviewers to present final assessments. When the Assessment Board convenes it reviews several annual assessments. Reviewers brief the board and provide a summary of the assessment. Each individual's Manager is present to answer Committee questions. Committee Meetings normally take place over a one or two day time period. Upon Board agreement, assessments are considered final.

Step 5: Debrief Meeting. The Employee Debrief Meetings take place in-person, if possible and include: the Reviewer, the Manager, and the Assessee. The Assessee does not receive a copy of the Assessment before the meeting, unless conducted by phone, and then only 15 minutes or so prior to the meeting. The Reviewer debriefs the Assessee on results and answer any questions the Assessee may have about the Assessment. The Manager is also there to provide answers and explanations. Salary action discussion between the Assessee and Manager take place at the Employee Debrief Meeting but only after the debrief and without the external Reviewer. Debrief Meetings can last anywhere from 30 minutes to an hour.

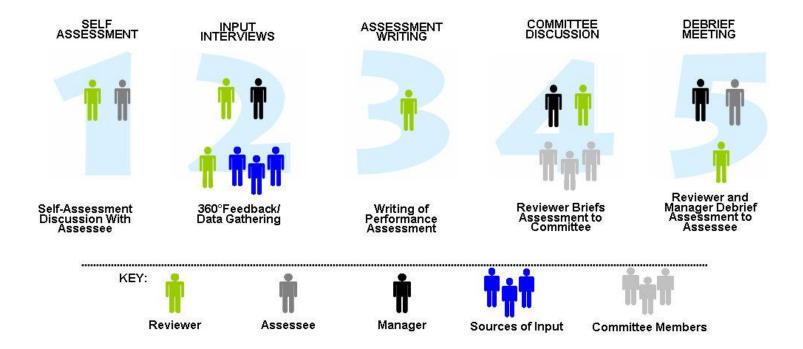


Figure 3 - 360°Assessment Process
Source: Booz Allen Hamilton Internal Training Material

The 360° Competency Assessment is a powerful tool. If adopted by the DoD it will enhance our workforce. The peer lead 360° Assessment as outlined in this paper drives results and values the institution desires while providing a candid performance measurement and a solid development plan to the Assessee. Senior executives at Booz Allen specified behaviors that the firm's best leaders exhibited as a base performance hoped for each employee—its core values and beliefs. At its center is the belief that people need accurate data to improve their performance. And a person can receive better data from all points of the compass rather than from just one. Feeding that information into the reward system at Booz Allen encouraged desired employee behavior.

An argument could be raised that a Peer Lead 360° Competency Assessment would be time consuming. Yet another point of view could suggest that the commitment would be worth the price of incorporating a single tool within the DoD to grow an enhanced, well rounded, and consistent military and civil servant workforce.

Predictable outcomes of applying the 360°Assessment tool at the DoD include: develop people for the institution with institutional perspective, breed a collaborative (joint) environment across the DoD, encourage skills to manage up, down, and across the organization, reduce "sharp elbows" sometimes seen in those who are focused on careerism, provide a specific development plan to our members, and remove supervisor bias through independent assessment of each employees competency. Further, while conducting the assessment, the Assessor, a peer, learns throughout the process what leads to success at his/her level.

Since most individuals like to think well of themselves, blind spots to their behavior and how their actions affect the organization develop. The Booz Allen 360°Assessment was designed to help keep employees, at all levels, in touch with the person that others saw as well as reinforce behavoirs key to the firm's success.

Conclusion

This paper shares lessons and recommendations for the improvement of DoD operations based on the authors fellowships at their sponsor companies. The observations and experiences of each of the authors were as personal and individual as their assignments within their corporations. Together, the lessons offer a variety of ways that DoD could implement aspects of transformation. The adoption of some, or all of the recommendations, may well provide cost savings as well as improved capabilities. The authors will use the experiences and knowledge gained during their fellowship to improve their own approaches to leadership, work, and Air Force operations, satisfying one of the developmental education goals of the program.

The recommendations themselves are insider observations of strategies from three highly successful American companies mixed with the authors' nearly 60 years of Air Force experience. Although the recommendations are anecdotal in some instances, based on the collective experience both in the companies and in the military, it is reasonable to consider further study of their adoption by the DoD. Since numerous senior DoD officials will be briefed on most of these recommendations personally during the program's out briefs, potential for having a recommendation researched for DoD adoption is high. Readers of this paper are encouraged to consider application of the recommendations included here within their own area of influence.

ENDNOTES

http://www.boozallen.com/news/40194484
 http://www.boozallen.com/news/39856120
 http://www.boozallen.com/about/annual_report

¹ http://blogs.sun.com/dador/entry/sunw_stanford_university_network_workstation ² Historic data for this section retrieved from http://www.sun.com/aboutsun/company/history.jsp http://www.sun.com/aboutsun/pr/2008-11/sunflash.20081114.1.xml http://www.oracle.com/us/corporate/press/018363 ⁵ Eco Computing for Government, White Paper, Jan 2008, internally published and available at http://www.sun.com/solutions/documents/whitepapers/gv_ecocomputing_gov.pdf 6 http://www.sun.com/aboutsun/environment/docs/newark_data center.pdf ⁷ Eco Computing for Government, White Paper, Jan 2008, internally published and available at http://www.sun.com/solutions/documents/whitepapers/gv_ecocomputing_gov.pdf 8 Interview with Dave Douglas, Senior Vice President and Chief Sustainability Officer, Sun Microsystems, 10 Feb 2009, Menlo Park, CA http://www.greenercomputing.com/blog/2007/09/11/how-many-watts-does-pcconsume-exactly-and-why ¹⁰ Interview with Bill Vass, President, Sun Microsystems – Federal, 10 Feb 2009, Menlo Park, CA 11 http://www.opensource.org/ ¹² Interview with Bill Vass, President, Sun Microsystems – Federal, 10 Feb 2009, Menlo Park, CA 13 http://www.disa.mil/news/pressreleases/2009/ossi 031709.pdf ¹⁴ Ibid. 15 http://www.oss-institute.org/ http://news.bbc.co.uk/2/hi/technology/7841486.stm 17 http://www.opensource.org/node/372 ¹⁸ Fortune Magazine, Vol. 159, No. 9, Page 117, May 4, 2009 19 http://www.jnj.com/connect/about-jnj/company-structure/ http://www.jnj.com/connect/about-jnj/company-history/ 21 http://storiesofjnjs.jnj.com/history/default.asp?file=jnj ²² Ibid. ²³ Ibid. ²⁴ http://www.jnj.com/connect/about-jnj/company-structure/ 25 http://www.jnj.com/connect/about-jnj/ ²⁶ 2009 Annual Meeting of Shareholder, April 23, 2009, New Brunswick, NJ ²⁷ Ibid. ²⁸ Ibid. ²⁹ http://www.boozallen.com 30 http://www.boozallen.com/about/history

Dec 2009, McLean, VA

36 Interview with Joe Garner, Senior Vice President, Booz Allen Hamilton, 16 Oct 2008, McLean, VA

³⁵ Interview with Dr Ralph Shrader, Chairman and CEO, Booz Allen Hamilton, 9

http://www.boozallen.com/about/article/981234

http://money.cnn.com/magazines/fortune/bestcompanies/2009/

http://www.boozallen.com/news/40587745

http://www.boozalien.com/about/article/40680887

http://www.boozallen.com/about/article/40680887

http://www.boozallen.com/careers/a_great_place_to_work/culture_core_values

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